

7/17/2003

# ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

<b>Title of Invention</b>	<b>DETECTION OF CHEMICAL LIGATION USING FLUORESCENCE QUENCHING LEAVING GROUPS</b>
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Application Number :

Confirmation Number:

First Named Applicant: Eric KOOL

Attorney Docket Number: 12665.0024.NPUS01

Art Unit: 1637

Examiner: Teresa Stuebele

Search string: ( 5476925 or 5476930 or 5646260 or 5648480 or 5681943 or 5932718 ).pn

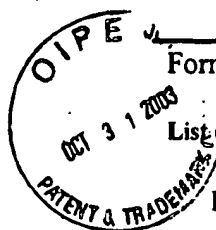
## US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
TS	1	5476925	1995-12-19	Letsinger et al.		536	23.1
	2	5476930	1995-12-19	Letsinger et al.		536	25.3
	3	5646260	1997-07-08	Letsinger et al.		536	23.1
	4	5648480	1997-07-15	Letsinger et al.		536	25.34
	5	5681943	1997-10-28	Letsinger et al.		536	25.33
TS	6	5932718	1999-08-03	Letsinger et al.		536	25.33

## Signature

Examiner Name	Date
Teresa Stuebele	4/12/06



Form PTO-1449 (modified)

List of Patents and Publications for Applicant's

## INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Atty. Docket No.

12665.0024.NPUS01

Serial No.

10/604,400

Applicant

Eric T. Kool

Filing Date:

July 17, 2003

Group:

~~1645~~ 1637

U.S. Patent Documents

N/A

Foreign Patent Documents

N/A

Other Art

See Page 3

## Other Art (Including Author, Title, Date, Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
TS	✓ C1	"Nucleophilic Reactions of Some Nucleoside Phosphorothioates;" Stanislav Chladek and Joseph Nagyvary; J. Am. Chem. Soc.; Vol. 94, No. 6, March 22, 1972; pp. 2079-2085
	✓ C2	"Nucleoside S-Alkyl Phosphorothioates. IV. Synthesis of Nucleoside Phosphorothioate Monoesters;" Alan F. Cook; J. Am. Chem. Soc.; Vol. 92, No. 1; January 14, 1970; pp. 190-195
	✓ C3	"Multicolor Molecular Beacons for Allele Discrimination;" Sanjay Tyagi, Diana P. Bratu and Fred Russell Kramer; Nature Biotechnology, Vol. 16, January 1998; pp. 49 - 53
	✓ C4	"Enhancement of Selectivity in Recognition of Nucleic Acids Via Chemical Autoligation;" Sergei M. Gryaznov; Ronald Schultz; Surendra K. Chaturvedi and Robert L. Letsinger; Nucleic Acids Research, Vol. 22, No. 12, June 25, 1994 Oxford University Press; pp. 2366 - 2369
	✓ C5	"A Covalent Lock for Self-Assembled Oligonucleotide Conjugates;" Mathis K. Herrlein, Jeffrey S. Nelson and Robert L. Letsinger; J. Am. Chem. Soc.; Vol. 117, No. 40, October 11, 1995; pp. 10151-10152
	✓ C6	"A Novel 5'-Iodonucleoside Allows Efficient Nonenzymatic Ligation of Single-stranded and Duplex DNAs;" Yanzheng Xu and Eric T. Kool; Tetrahedron Letters, Vol. 38, No. 32, August 11, 1997; pp. 5595-5598
TS	✓ C7	"Quencher as Leaving Group: Efficient Detection of DNA-Joining Reactions;" Shinsuke Sando and Eric T. Kool; J. Am. Chem. Soc., Vol. 124, No. 10, 2002; pp. 2096-2097
	C8	"Molecular Genetic Imaging of RNA in Bacteria by Self-ligation of quenched DNAs;" Shinsuke Sando and Eric T. Kool; Department of Chemistry, Stanford University.
	C9	
	C10	
	C11	
	C12	
	C13	
	C14	

EXAMINER:

Teresa Stuelcken

DATE CONSIDERED:

4/12/06

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INFORMATION DISCLOSURE STATEMENT — PTO-1449 (MODIFIED)

Form PTO-1449 (modified)

Atty. Docket No.  
12665.0024.NPUS01Serial No.  
10/604,400

List of Patents and Publications for Applicant's

Applicant  
Eric T. KOOL

INFORMATION DISCLOSURE STATEMENT

Filing Date:  
July 17, 2003, 2003Group:  
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(Use several sheets if necessary)

U.S. Patent Documents  
N/AForeign Patent Documents  
N/AOther Art  
See Page 1

## U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing date of App.
	A1						
	A2						
	A3						

## Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
	B1						
	B2						
	B3						

## Other Art (Including Author, Title, Date, Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
TS	C1	"Oligonucleotides with Fluorescent Dyes at Opposite Ends Provide a Quenched Probe System Useful for Detecting PCR Product and Nucleic Acid Hybridization," Kenneth J. Livak, Susan J.A. Flood, Jeffrey Marmaro, William Giusti, and Karin Deetz; PCR Methods and Applications, Vol. 4, No. 6, June 1995; pp. 357-362.
	C2	International Search Report from PCT/US03/22320, dated July 21, 2004
	C3	
	C4	
	C5	

EXAMINER: Tessa Strlechia

DATE CONSIDERED: 4/12/06

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